Response to Final Office Action

Appl. No: 10/521,518

Art Unit 1638

Applicant: Eduard Daniel Leendert Schmidt

Our Docket: 294-208 PCT/US/RCE

Page 2 of 7

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claims 1-27: (Canceled)

28. (Currently amended) A method for increasing or decreasing development

organ formation, organ size, or rate of cell division of a plant or plant cell, compared
to a wild-type plant or plant cell of the same plant species, said method comprising:

plant cell by recombinant means, said with an RKS4 gene comprising the nucleotide sequence as set forth in SEQ ID NO: 46 operably linked to a promoter, wherein increasing expression of the RKS4 gene increases the development and decreasing expression of the RKS4 gene decreases the development organ formation, organ size, or rate of cell division of the plant or the plant cell.

- 29. (Canceled)
- 30. (Currently amended) The method of claim-29 28, wherein the organ comprises a vegetative organ.
- 31. (Currently amended) The method of claim-29_28, wherein the organ comprises a reproductive organ.

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Appl. No: 10/521,518

Art Unit 1638

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Our Docket: 294-208 PCT/US/RCE

Page 3 of 7

32. (Currently amended) The method of claim-29_28, wherein the organ is selected from the group consisting of a leaf, shoot, root, flower, pollen, and seed.

- 33. (Currently amended) A method for providing pathogen resistance to a plant or plant cell comprising increasing expression of a RKS4 gene in the plant or plant cell by recombinant means, said transforming the plant or plant cell with an RKS4 gene comprising the nucleotide sequence as set forth in SEQ ID NO: 46 operably linked to a promoter, wherein an increase in the expression of the RKS4 gene provides pathogen resistance to the plant or plant cell.
- 34. (New) A method for decreasing organ formation, organ size, or rate of cell division of a plant or plant cell, compared to a wild-type plant or plant cell of the same plant species, said method comprising:

transforming the plant or plant cell with an RKS4 gene comprising the nucleotide sequence as set forth in SEQ ID NO: 46 in antisense orientation operably linked to a promoter,

wherein expression of the RKS4 gene decreases the organ formation, organ size, or rate of cell division of the plant or the plant cell.

- 35. (New) The method of claim 34, wherein the organ comprises a vegetative organ.
- 36. (New) The method of claim 34, wherein the organ comprises a reproductive organ.

Appl. No: 10/521,518

Art Unit 1638

Applicant: Eduard Daniel Leendert Schmidt

Our Docket: 294-208 PCT/US/RCE

Page 4 of 7

37. (New) The method of claim 34, wherein the organ is selected from the group consisting of a leaf, shoot, root, flower, pollen, and seed.

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